

Dam Safety Overview

The Bureau of Reclamation (Reclamation) is responsible for about 370 storage dams and dikes that form a significant part of the water resources infrastructure for the western United States. As the owner of these facilities, Reclamation is committed to providing the public and the environment with adequate protection from the risks which are inherent to collecting and storing large volumes of water for later distribution and/or release.

The mission of the Reclamation Dam Safety Program is to ensure that Reclamation facilities do not present unreasonable risks to the public, public safety, property, and/or the environment. This is accomplished through recurring monitoring, inspections, and evaluation of the performance of the dams. This process also includes periodic re-evaluation of the design, construction and performance history of the dam in comparison to current state of the art design, construction, and public safety practices.

Reclamation utilizes risk analysis as a tool to enable technical specialists and decisionmakers to better understand possible failure mechanisms and the elements of risk involved in the various issues related to dam safety. It provides an overall picture of risks, the potential impacts of proposed actions, and the resulting costs (economic, social and other). The results of risk analyses can contribute to efficient accomplishment of the dam safety program by quantifying engineering judgments that allow for the evaluation of:

- Factors contributing the greatest risk at a given site,
- The facilities with the greatest risk,
- Identification of additional analyses and/or data collection that are needed to better understand critical uncertainties,
- Anticipated risk reduction effectiveness of alternative courses of action,

The results of the risk analysis are utilized to identify dams requiring remedial actions to reduce risk, to prioritize those actions and to allocate dam safety program funds that will contribute the greatest overall risk reductions. Reclamation develops and implements remedial actions considering the cost effectiveness of the actions, the risk reduction provided by the actions and a number of other environmental and economic factors.

Reclamation's Dam Safety Program was officially implemented in 1978 with passage of the Reclamation Safety of Dams Act, Public Law 95-578. This act was amended in 1984 under Public Law 98-404, in 2000 under Public Law 106-377, in 2002 under Public Law 107-117, and in 2004 under Public Law 108-439 ([Reclamation Safety of Dams Act, as amended](#)).